

USSR/Plant Physiology - Respiration and Metabolism

Abstr. Jour. : RZBiol., No. 19, 1958, No. 57053

A positive influence on the growth of the potato plants (in the early stage), on the yield of tubers (in the late stage), on the content of starch and on the content of protein in the tubers (in the late stage). The content of starch and protein in the tubers was increased by the application of borax, the other elements -- as sulfate salts. The work was conducted in 1954-1955 at the experiment base of the Kuznetskaya experiment station, in non-textured, clayey siltloam. On application prior to planting the best dosages for potatoes were found to be: borax 2 kg/hectare, $MnSO_4$ 15 kg/hectare, $CuSO_4$ and $ZnSO_4$ 4 kg/hectare. For potatoes of summer planting: borax 6-12 kg/hectare, $MnSO_4$ 10-15 kg/hectare, $CuSO_4$ 8-12 kg/hectare, $ZnSO_4$ 1-2 kg/hectare. For potatoes of spring planting: borax 4-8 kg/hectare, $MnSO_4$ 15 kg/hectare, $CuSO_4$ 4-8 kg/hectare, $ZnSO_4$ 1-2 kg/hectare.

Country : U.S.S.R.
CATEGORY :

ABSTR. JOUR. : RZBiol., No. 19, 1958, No. 57053

AUTHOR : Mardalov, A. A.
INST. : Institute of Agriculture, Azerbaijan SSR
TITLE : Effect of minor elements on growth, development and yield of tomatoes and potatoes

ORIG. PUB. : Tr. 5-y Nauchn. konferentsii aspirantov AN Azerbaidzhan. Baku, AN Azerbaidzhan, 1957, 259-270
ABSTRACT : Study of the effect of B, Mn, Cu, Zn, on tomatoes and potatoes, on different procedures of application of varying dosages of these elements. B was applied as borax, the other elements -- as sulfate salts. The work was conducted in 1954-1955 at the experiment base of the Kuznetskaya experiment station, in non-textured, clayey siltloam. On application prior to planting the best dosages for potatoes were found to be: borax 2 kg/hectare, $MnSO_4$ 15 kg/hectare, $CuSO_4$ and $ZnSO_4$ 4 kg/hectare. For potatoes of summer planting: borax 6-12 kg/hectare, $MnSO_4$ 10-15 kg/hectare, $CuSO_4$ 8-12 kg/hectare, $ZnSO_4$ 1-2 kg/hectare. For potatoes of spring planting: borax 4-8 kg/hectare, $MnSO_4$ 15 kg/hectare, $CuSO_4$ 4-8 kg/hectare, $ZnSO_4$ 1-2 kg/hectare.

ABUTALYBOV, M.; MARDANOV, A.

Improving the composition of starter pots for tomatoes by adding trace elements. Dokl.AN Azerb.SSR 11 no.9:623-626 '55, (MLRA 9:1)

1.Predstavleno deystvitel'nyy chlenom AN Azerbaydzhanskoy SSR.
(Tomatoes) (Trace elements)

TAGI-ZADE, T.A.; SAMEDOV, A.S.; MARDANLY, A.S.

Pathogenic properties of Leptospira isolated in Azerbaijan.
Dokl. AN Azerb. SSR 18 no.12:69-73 '62. (MIRA 16:11)

1. Predstavleno akademikom AN AzerSSR A.I. Karayevym.

KASIMOV, G.B., prof.; MARDANLY, A.S.

Academician K.I. Skriabin, founder of Soviet helminthology. Azerb.
med.zhur. no.1:81-83 Ja '59. (MIRA 12:4)
(SKRIABIN, KONSTANTIN IVANOVICH, 1878-)

MARDANENKO, V.P.; BEN'KOVSKIY, V.G.

Methodology for the separation and analysis of the natural emulsifiers
of water and petroleum. Khim. i tekhn. topl. i masel 10 no.7:41-45 J1
'65. (MIRA 18:9)

1. Institut khimii nefti i prirodnikh soley AN KazSSR.

SHERGILOV, N.V.; MARDANENKO, V.P.; FILATOVA, M.A.; BEN'KOVSKIY, V.G.

Overalkalinity of kerosine-gas oil distillates. Khim. i tekhn.
topl. i masel 7 no.10:36-41 0*62 (MIRA 1787)

MARDAN, Yu.M.

Gluing wood using ultrasonic waves. Der. prom. 14 no. 12:
25-26 D '65. (MIRA 18:12)

MARDAN, Yu.M.

Ultrasonic equipment for wood gluing. Bum. i der. prom.
no.4:21-23 O-D '65. (MIRA 18:12)

MARDAN, Yu.M.

Application of ultrasonic waves for the intensification of the
gluing of tendon plate. Par. 1 ser. 1, item no. 3 (1987) - 1, 2, 3, 4, 5.
(M SA 18:7)

MARDALIYEV, S.A., otvetstvennyy za vypusk.

[Baku municipal telephone directory] Spravochnik Bakinskoi
gorodskoi telefonnoi seti. Baku. Pt.1. 1958. 198 p. (MIRA 11:10)

1. Azerbaijan. Ministerstvo svyazi.
(Baku—Telephone directories)

RADICH, L; MARDALEYSHVILI, R.Ye.

Isotopic exchange of free radicals with deuterium. Dokl. AN SSSR
146 no.3:618-620 S '62. (MIRA 15:10)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Predstavlena akademikom N.N.Semenovym.
(Deuterium) (Radicals (Chemistry))

POPOV, A.G.; MARDALEYSHVILI, R.Ye.

Self-hydrogenation of C_2H_4 and C_3H_6 in a separate and simultaneous chemisorption of these gases on Pt, Pd, and Ni films. Vest.Mosk. un. Ser.2:khim. 17 no.1:34-38 Ja-F '62. (MIRA 15:1)

1. Moskovskiy gosudarstvennyy universitet, kafedra khimicheskoy kinetiki.

(Ethylene)

(Propene)

(Hydrogenation)

89736

The Thermal Disintegration of Some Organic Compounds in the Presence of Deuterium

S/020/61/136/003/Q24/027
B004/B056

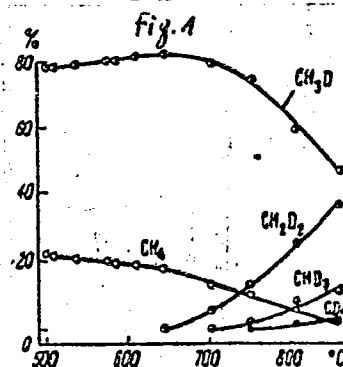
since polysubstituted methanes are produced by secondary reaction only above 600°C. There are 2 figures, 2 tables, and 10 references: 2 Soviet, 6 US, and 2 British.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

PRESENTED: July 14, 1960, by N. N. Semenov, Academician

SUBMITTED: July 7, 1960

Card 4/4



89736

The Thermal Disintegration of Some Organic
Compounds in the Presence of Deuterium

S/020/61/136/003/024/027
B004/B056

Above 600°C an intensification of the processes sets in (10 - 30% yield), and polysubstituted methanes including CD₄ occur as a result of these secondary processes. Experiments concerning the effect produced by S/V (ratio between surface and volume of the reaction vessel varied by checking the vessel and the quartz tubes) showed that in the checker vessel CH₃D/CH₄ decreases with a falling P (<4 mm Hg), but also does not depend on τ. The conclusion is drawn that the measurement of the reaction rate by comparing the rate of (1) with (2) is not influenced by secondary processes only up to 500 - 550°C. In Table 2 the activation energies E₁ calculated from CH₃D/CH₄ are given; CH₃COCH₃ : 9.2±0.3; CH₃CHO : 7.9±0.5; (CH₃)₃CO₂ : 9.5±0.3; Hg(CH₃)₂ : 9.9±0.5. These data agree with those of the photolysis (Refs. 4, 6-10) with the exception of the value of di-tert-butyl-peroxyde. Here, the authors assume that the value given by G. O. Pritchard, H. O. Pritchard, and A. F. Trotman-Dickenson (Ref. 4) is too high. The agreement between E₁ in case of the photolysis and pyrolysis permits the conclusion that in the photolysis no "hot" radicals are produced. Besides, the scheme assumed by Voyevodskiy et al. is disproved

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The Thermal Disintegration of Some Organic
Compounds in the Presence of Deuterium

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purpose of the present paper to find out whether deuterium is applicable for the purpose of determining the constants of thermal processes. Besides, the assumption made by V. V. Voyevodskiy, G. K. Lavrovskaya, and R. Ye. Mardaleyshvili was to be checked, according to which an isotopic exchange between free radicals and D_2 occurs, and with an excess of D_2 the hydrogen atoms on C (with non-saturated valence) are completely substituted (Ref. 3). For this purpose, the separation of the hydrogen atoms by methyl radicals was investigated in the presence of deuterium. The methyl radicals were obtained by pyrolysis with acetaldehyd, acetone, dimethylmercurium, and di-tert-butylperoxyd. The following experimental conditions are given: duration of contact τ 0.1 - 4 sec; total pressure $P = 0.6 - 5$ mm Hg, temperature 130 - 850°C, 10 - 15-fold excess of D_2 . Measurements of the ratio between the various deuteromethanes were made by means of an MC-4(MS-4) mass spectrometer. For the pyrolyses of the acetone, the results are represented in Fig. 1. The other substances yielded similar results. At 500-600°C the degree of thermal decomposition amounts, depending on the duration of contact, to 0.01 - 5%. The methane contains only CH_3D and CH_4 . The ratio CH_3D/CH_4 does not depend on P and τ .

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S/020/61/136/003/024/027
B004/B056

54700

2209, 1360, 1273

AUTHORS: Radich, L., Kravchuk, I. P., and Mardaleysvili, R. Ye.
TITLE: The Thermal Disintegration of Some Organic Compounds in the Presence of Deuterium
PERIODICAL: Doklady Akademii nauk SSSR, 1961, Vol. 136, No. 3, pp. 657-659

TEXT: The authors study the problem as to whether the method of determining the reaction constants by means of isotopic exchange, which has been developed for photochemical reactions, is applicable also to thermal processes. In the photolytic processes $\dot{R} + R_1H \rightarrow RH + \dot{R} \quad (1)$;
 $R + D_2 \rightarrow RD + \dot{D} \quad (2)$ the activation energy of the reaction (2) may be determined if the ratio RH/RD at various temperatures, and the activation energy of the reaction (2) are known. In thermal reactions, the difficulty consists in the fact that secondary processes occur, in which the same products are able to form as in the reactions (1) and (2). It was the

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On Two Types of Elementary Reactions in the
Catalytic Hydrogenation of Olefins

S/020/61/136/001/034/037
B004/B056

Besides, the results may be taken a proof of the existence of surface molecules. There are 2 figures, 1 table, and 7 references: 2 Soviet, 8 US, 5 British, and 1 Japanese.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov) ✓

PRESENTED: July 14, 1960 by N. N. Semenov, Academician

SUBMITTED: July 7, 1960

Card 4/4

On Two Types of Elementary Reactions in the
Catalytic Hydrogenation of Olefins

S/020/61/136/001/034/037
B004/B056

will be smaller than w_3/w_2 (ratio of the initial rates in the case of separate hydrogenation of the two olefins). 2) The difference between w_{32}/w_{23} and w_3/w_2 will decrease with increasing hydrogen pressure because then recombination of the surface radicals with hydrogen atoms will be the chief process. 3) The greatest difference between w_{32}/w_{23} and w_3/w_2 must be observed at low temperatures, at which olefin concentration on the catalyst is higher than in the case of high temperatures, and therefore the portion of disproportions will increase. In order to check these assumptions, joint hydrogenation of ethylene and propylene was carried out in a circulation device with electrically heated platinum wire as catalyst. Reaction was studied by means of a pressure-gauge (measurement of pressure variations in the system) and mass-spectroscopic analysis of the reaction products. The experiments were performed at 525 mm Hg, a ratio of olefins: hydrogen = 1 : 1 to 1 : 20, in the temperature range of 0 - 280°C. The results are presented in Table 1. They confirm the assumptions and predictions made by the authors. Two types of reactions occur on olefin hydrogenation, namely recombination and disproportionation.

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On Two Types of Elementary Reactions in the
Catalytic Hydrogenation of Olefins

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The latter recombine with hydrogen according to the scheme
 $\dot{\text{C}}\text{H}_2-\text{CH}_3 + \text{H} \rightarrow \text{C}_2\text{H}_6 + 2\text{cat}^{\cdot}$ (3). However, also disproportionation processes
cat cat

should occur besides the processes mentioned, if the assumption of surface
radicals is correct: $\text{CH}_2-\text{CH}_2 + \text{CH}_2-\text{CH}_2 \rightarrow \text{CH}_2-\text{CH}_3 + \text{CH}=\text{CH}_2$ (4);
cat cat cat cat

$\dot{\text{C}}\text{H}_2-\text{CH}_3 + \dot{\text{C}}\text{H}_2-\text{CH}_3 \rightarrow \text{CH}_2-\text{CH}_2 + \text{C}_2\text{H}_6 + \text{cat}^{\cdot}$ (5);
cat cat cat

$\text{CH}_2-\text{CH}_3 + \text{CH}_2-\dot{\text{C}}\text{H}_2 \rightarrow \text{CH}=\text{CH}_2 + \text{C}_2\text{H}_6 + \text{cat}^{\cdot}$ (6). On hydrogenation of a
cat cat cat

mixture of two olefins, such a disproportionation would lead to products
which do not occur in the case of separate hydrogenation of a single olefin:

$\text{CH}_3-\dot{\text{C}}\text{H}-\text{CH}_2 + \text{CH}_2-\dot{\text{C}}\text{H}_2 \rightarrow \text{CH}_2=\text{CH}-\text{CH}_2 + \text{CH}_3-\text{CH}_2$ (7). On these conditions
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the following predictions are made: 1) In the case of joint hydrogenation
of ethylene and propylene, the ratio w_{32}/w_{23} of the initial reaction rates

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S/020/61/136/001/034/037
B004/B056

AUTHORS: Mardaleyshvili, R. Ye., Popov, A. G., Nikisha, V. V., and Yakushin, F. S.

TITLE: On Two Types of Elementary Reactions in the Catalytic Hydrogenation of Olefins

PERIODICAL: Doklady Akademii nauk SSSR, 1961, Vol. 136, No.1, pp. 155-158

TEXT: A paper by N. N. Semenov, V. V. Voyevodskiy, and F. F. Vol'kenshteyn (Ref. 1) gave rise to the present investigation. In the former it was assumed that the free valences upon solid surfaces lead to the formation of so-called surface radicals. These cause heterogeneous catalysis. The authors completed this assumption by assuming formation of two types of radicals: $C_2H_4 + 2cat \cdot \rightleftharpoons CH_2-\dot{C}H_2 + cat \cdot \rightleftharpoons CH_2-\dot{C}H_2$ (1);

$CH_2-\dot{C}H_2 + \dot{H} \rightleftharpoons CH_2-CH_3 \rightleftharpoons \dot{C}H_2-CH_3$ (2). The radicals (a) are bound to the catalyst (cat) by two electrons, the radicals (b) by one electron only.

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SOV/76-33-9-12/37

Kinetics of the Symmetrization Reaction of Organomercury Salts. II. Determination of the Reaction Order of Symmetrization With Ammonia of the Esters of α -Bromo Mercurio Phenyl Acetic Acid With Respect to Ammonia

saturated carbon atom. It had already been shown (Ref 2) that the symmetrization in question leaves the stereochemical configuration unaltered; thus, a bimolecular reaction of the mentioned kind with preserved stereochemical configuration was established for the first time. There are 6 figures, 7 tables, and 3 references, 2 of which are Soviet.

SUBMITTED: February 21, 1958

Card 3/3

SOV/76-33-9-12/37

Kinetics of the Symmetrization Reaction of Organomercury Salts. II. Determination of the Reaction Order of Symmetrization With Ammonia of the Esters of α -Bromo Mercuric Phenyl Acetic Acid With Respect to Ammonia

function of its initial square concentration (Tables 2,3). Nephelometric measurements were likewise made, and the values for $I = f(t)$ are tabulated (Table 4). In both cases, a direct dependence of the initial reaction rate on the initial square concentration of (I) was ascertained. In the symmetrization of (II), (I) is, under prevailing conditions, consumed according to the second order. From the curves $I = f(t)$ the portion of reacted (II) was found to depend upon the various initial concentrations of (I) (Table 5); it was further ascertained with the titration method that in the case of (II) amounting to $1.36 \cdot 10^{-3}$ mol and (I) lying below $4.30 \cdot 10^{-3}$ mol, the reaction intensity is determined by the initial concentration of (I) (Table 6). Additions of a symmetrical compound $(R_1R_2R_3C^-)_2Hg$ (formed in the course of reaction) (Table 7) showed that when increasing the concentration of these additions the reaction rate is lowered. The symmetrization reaction under investigation is assumed to take place in two stages (1) and (2), where (1) is a bimolecular electrophilic substitution in the

Card 2/3

5(4)

SOV/76-33-9-12/37

AUTHORS:

Reutov, O. A., Beletskaya, I. P., Mardaieyshvili, R. Ye.

TITLE:

Kinetics of the Symmetrization Reaction of Organomercury Salts.
II. Determination of the Reaction Order of Symmetrization With
Ammonia of the Esters of α -Bromo Mercurio Phenyl Acetic Acid
With Respect to Ammonia

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 9, pp 1962-1968
(USSR)

ABSTRACT:

In follow-up of a previous report (Ref 1), further investigations were made here concerning the reaction mentioned in the title, with special regard to the reaction order with respect to ammonia (I) as well as the influence exerted by (I) concentration and various additions upon the rate and intensity of symmetrization. Experiments were made in a test tube (Fig 1) with $1.36 \cdot 10^{-3}$ mol of organomercury salt (II) and (3.28, 2.76, 2.12, 1.60, 1.07) $\cdot 10^{-3}$ mol (I). The reaction was stopped at various time intervals by the addition of an excess of 0.149 n HCl (with respect to the (I)-amount), and the acid excess was titrated (Table 1). The order of reaction with respect to (I) was determined from the initial reaction rate of (I) as a

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Reaction Kinetics of the Symmetrization of Organo-
Mercury Salts. I. Determination of the Order From the Organo-Mercury Salt
of the Reaction of the Symmetrization of Esters of α -Mercury Bromide Phenyl-
acetic Acid Under the Influence of Ammonia

SOV/76-33-1-25/45

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: July 4, 1957

Card 3/3

Reaction Kinetics of the Symmetrization of Organo-
Mercury Salts. I. Determination of the Order From the Organo-Mercury Salt
of the Reaction of the Symmetrization of Esters of α -Mercury Bromide Phenyl-
acetic Acid Under the Influence of Ammonia

SOV/76-33-1-25/45

structure in the mechanism S_E1 and a change of the structure
in S_E2 . Since a progress of the reaction mentioned in the
title is doubtful with S_E2 , the reaction kinetics of ethylene
and 1-menthyl ester of (I) was investigated with ammonia
in the case under discussion. The symmetrization of
 $R_1R_2R_3CHgX$ ($R_1 = C_6H_5$, $R_2 = H$, $R_3 = COOC_{10}H_{19}$) took place
in absolute chloroform, mixed with ammonia, at 20° . The
nephelometric measuring method was used. The concentration
of the substances was in the range of
 $(6.8-0.85) \cdot 10^{-5}$ mol/ml. The reaction order of $R_1R_2R_3CHgX$
was determined by the kinetic curves and the initial con-
centration of (I). The experimental results obtained showed
that the symmetrization reaction of $R_1R_2R_3CHgX$ is of the
second order. There are 4 figures, 1 table, and 3 references,
1 of which is Soviet.

Card 2/3

5(4)
AUTHORS:

SOV/76-33-1-25/45
Rentov, O. A., Beletskaya, I. P., Mardaleysvili, R. Ye.

TITLE:

Reaction Kinetics of the Symmetrization of Organo-Mercury Salts (Kinetika reaktsii simmetrizatsii rtutnoorganicheskikh soley). I. Determination of the Order From the Organo-Mercury Salt of the Reaction of the Symmetrization of Esters of α -Mercury Bromide Phenylacetic Acid Under the Influence of Ammonia (I. Opredeleniye poryadka po rtutnoorganicheskoy soli reaktsii simmetrizatsii efirov α -brommerkurfeniluksusnoy kisloty pod deystviyem ammiaka)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 1, pp 152 - 155 (USSR)

ABSTRACT:

On the example of the diastereomeric 1-menthyl esters of the α -mercury bromide phenyl acetic acid (I) it had already been found earlier (Ref 1) that the symmetrization of organo-mercury salts with ammonia proceeds with a constant stereochemical structure. Winstein (Uinshteyn) (Ref 2) obtained the same results on experiments with a different salt, whereas Hughes and Ingold (Kh'yuz and Ingol'd) assumed that an electrophilic substitution takes place with a constant

Card 1/3

SOV/120-59-4-39/50

An Automatic Device for Filling an Evacuated Bulb with Gases Produced by Electrolysis

U-tube, then the gas from the electrolyzer cannot reach the collecting bulb. Since gas is continuously evolved during electrolysis its pressure will eventually force mercury down in the U-tube until some part of the porous filter is uncovered. The gas will then seep through the filter towards the bulb. When this happens the pressure in the left-hand side of the U-tube will fall and mercury will rise again and cover the porous filter. The device described here has been used for several years in production of hydrogen, oxygen and their isotopes as well as for other gases such as ethane. There is 1 figure. Note: This is a complete translation.

ASSOCIATION: Khimicheskiy fakul'tet MGU (Chemistry Department, Moscow State University)

SUBMITTED: July 8, 1958.

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SOV/120-59-4-39/50

AUTHOR: Mardaleyshvili, R. Ye.

TITLE: ~~An Automatic Device for Filling an Evacuated Bulb with Gases~~
Produced by Electrolysis

PERIODICAL: Priory i tekhnika eksperimenta, 1959, Nr 4, p 147 (USSR)

ABSTRACT: When evacuated bulbs are filled with gases produced by electrolysis there is a chance of some of the electrolyte entering the bulb. The present note describes a device which avoids this danger. The device is based on the fact that mercury does not pass through a porous glass filter Nr 4 even if there is vacuum on the other side. Fig 1 shows the device schematically. A disc 1, of 10-15 mm diameter, made of a porous glass filter Nr 4, is fused into a U-shaped tube, one of whose arms (left-hand one) is attached to the electrolyzer exit tube. The latter is joined by tubing to a reservoir 2 filled with mercury. By raising the reservoir we can raise the mercury level in the left-hand arm of the U-shaped tube. The right-hand arm of the U-tube is joined to the bulb in which the gas is to be collected. A small trap consisting of a glass filter Nr 4, with a 2-3 mm layer of mercury above it, is placed above one of the electrolyzer cells (Fig 1); the other cell leads directly to the U-tube. If mercury covers completely the porous partition (1) in the

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The Kinetics of the Electrophile Supplementary Reaction Beside 2o-4- 25/51
a Saturated Carbon Atom.

firmed by the fact that the addition of the end product slows down the reaction (figure 4); the results obtained of the symmetrisation of mercury-organic salts by ammonium made the authors suggest a 2-stage mechanism of the reaction (scheme is given): I st (reversible) stage is the reaction mentioned in the title. In the II nd stage ammonium binds $HgBr_2$ and shifts the equilibrium I to the right. These results facilitate to detect for the first time a bimolecular mechanism of the reaction mentioned in the title in which the stereochemical configuration is conserved. There are 4 figures, 2 tables and 6 references, 1 of which is Slavic.

ASSOCIATION: State University imeni M. V. Lomonosov, Moscow (Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova)

PRESENTED: March 15, 1957, by A. N. Nesmeyanov, Academician

SUBMITTED: February 22, 1957

AVAILABLE: Library of Congress

Card 3/3

The Kinetics of the Electrophile Supplementary Reaction Beside 2o-4-25/51
a Saturated Carbon Atom.

the quantity alteration of the light passing through in the course of the reaction in consequence of the deposition formation of $(\text{NH}_3)_2 \cdot \text{HgBr}_2$ according to an equation given here. The reaction has a second order for the two mercurized ethers (ethyl- and methyl). The symmetrisation of the first ethers takes place quicker of the latter. The constant of the reaction velocity is of second order:

$$K_2 = \frac{1}{C_0 T} \left(\frac{C_0}{C} - 1 \right), C \text{ is the concentration}$$

of substance in the time t ; $K_2 = K'(\text{NH}_3)^2$ (so in the original text - the reporter), as it is shown in the further course. In the second part of the paper the order of the reaction was detected with respect to the second component- ammonium. If the concentration alteration of NH_3 in the course of the first half hour is equated with the initial velocity of the reaction it is easily to be proved that the initial velocity of the ammonium consumption is directly proportional to the square of its initial concentration. Thus the reaction investigated here has the second order with respect to the two substances. As the reaction took place not only with a different effect and is finished in the case of different quantities of consumed substance, it can be assumed that the symmetrisation reaction is reversible. This is con-

Card 2/3

MARDALEYSHVILI, R. Ye.

20-4-25/51

AUTHORS: Reutov, O. A., Beletskaya, I. P., and
Mardaleyshvili, R. Ye.,

TITLE: The Kinetics of the Electrophile Supplementary Reaction Beside
a Saturated Carbon Atom (Kinetika reaktsii elektrofil'nogo za-
meshcheniya u nasyshchennogo uglerodnogo atoma)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 4, pp. 617-620 (USSR)

ABSTRACT: By means of the example of diastereomeric 1-methyl-ethers of the
 α -bromium-mercury-phenyl-acetic acid Nesmeyanov, Poddubnaya, and
the first author have found that the symmetrisation of the mer-
cury-organic salts takes place by ammonium which represents the
reaction mentioned in the title takes place under the maintain-
ance of the stereochemical configuration. The authors thought
from the first that it seems not very probable that the sym-
metrisation of the mentioned ethers passes the stage of anion
formation (in contrast to Hughes and Ingold, reference 4). The-
refore they investigated the kinetics of the reaction in question.
A mixture of the diastereomers and the diastomer with the melting
point 156° of the above mentioned ether alone were used for this
purpose. In order to investigate the order of the reaction with
respect to the initial substance $R_1R_2R_3C-HgX$, a method was used
which is based upon the nephelometry-principle. A photocell fixed

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MARDALEYSHVILI, R. Ye.

Chem

The kinetics of the decomposition of diazonium salts with powdered iron. G. A. Reutor, A. G. Markovskaya, and R. E. Mardaleishvili (M. V. Lomonosov State Univ., Moscow). *Dokl. Akad. Nauk SSSR*, 30, 2532-4 (1986); cf. *CA*, 80, 6160a. The kinetics of the decompn. of the diazonium salts, PhSO_2Cl , $p\text{-YC}_6\text{H}_4\text{N}_2\text{Cl}$, was studied. Y substituents were O_2N , Cl, H, Me, and EtO , arranged in increasing order as electron donors. In the decompn. with powd. Fe in acetone soln., the reaction velocity was found to decrease with the increase in the electron donating power, in agreement with an earlier assumption of a heterolytic mechanism for the reaction. When Y substituents were meta-directing, e.g., NO_2 , CO_2Et , the double diazonium salts were readily dissociated in acetone at room temp. With powd. Fe, the decompn. of the double salt and that of the free aryldiazonium chloride occurred.

W. M. Sternberg

MARDALETSKVILL, R. E.

6

27

Determination of the Rate Constant of Dissociation of Hydrogen on the Surface of Palladium from Data on Diffusion Through Palladium. V. H. Kazansky, R. E. Mardaletskvill, V. P. Simoni, and V. V. Yevodsky (*Zhur. Fiz. Khim.*, 1956, 30, (4), 821-826).—[In Russian]. During the soln. and diffusion of H in Pd and other Pt-group metals, dissociation occurs on the surface of the metals, and in the bulk of the metal the gas exists in the at. or ionic form. K. *et al.* investigated math. the diffusion of H through Pd taking into account the processes occurring on the gas/metal interface. The resulting equation $k_{app} = a^2 D_1^2 + 2a D_1^{3/2} + 2 D_1$ gives good agreement with experiments. The influence of temp. and pressure on the diffusion rate was also investigated. On the basis of experimental data and from the soln. of the above equation, an expression was found for the rate const. of dissociation of H on the surface of the metal: $k_d = 10^4 \exp(-13000/RT) \text{ cm}^2 \text{ sec}^{-1}$. From this equation rate and energy of activation of H-D exchange can be found. The results compare favourably with experiments. On the basis of this good agreement a conclusion was reached that, at 140°-160° C, on Pd, the reaction $\text{H}_2 + \text{D}_2 \rightarrow 2\text{HD}$ takes place according to the association-dissociation mechanism.—A. W.

fra
NT

WARDALEYSCHVILI, R. Ye.

USSR/Physical Chemistry - Kinetics, Combustion, Explosions, Topo-chemistry, Catalysis.

B-9

Abs Jour: Referat. Zhurnal Khimiya, No 3, 1958, 7186.

Author : R. Ye. Wardaleyschvili, G.B. Pariyskiy, V.A. Poltorak, V.V. Voyevodskiy.

Inst : Academy of Sciences of USSR.

Title : Reaction of Deuterium Atoms with Alkenes. Dependence of Methane Deuterization on Concentration of Deuterium Atoms in System.

Orig Pub: Izv. AN SSSR. Otd. khim. n., 1956, No 5, 516-524.

Abstract: The exchange reaction of alkyl radicals with D_2 (RZh-Khim, 1956, 74392) was studied with the application of the mass-spectrometric analysis of D content in the being produced methane. The radicals were formed according to the reaction $D + M \rightarrow R$, where M was C_2H_4 , C_3H_6 , and $iso-C_4H_8$. In the cases of C_2H_4 and $iso-C_4H_8$, the D content in methane increased,

Card : 1/2

-4-

REUTOV, O.A.; MARKOVSKAYA, A.G.; MARDALYSHVILI, R.Ye.

Kinetics of the decomposition of the double salts
 $p\text{-XC}_6\text{H}_4\text{SbCl}_4 \cdot \text{C}_6\text{H}_5\text{N}_2\text{Cl}$ by iron powder. Dokl.AN SSSR 104 no.2:253-255
S '55. (MLRA 9:2)

1.Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova. Pred-
stavleno akademikom A.N.Nesmeyanovym.
(Antimony organic compounds) (Diazonium compounds)

MARDALASHVILI, R. E.

✓ 1957 TT-701 14
ISOTOPE EXCHANGE OF HYDROGEN IN FREE ALKYL
RADICALS (Izotopnyi Obmen Vodoroda v Svyobodnykh
 Alkil'nykh Radikalakh). G. N. Lavrovskaya (Lavrovskaya),
 R. E. Mardalashvili, and V. V. Voevodskii. Translated
 by G. B. Kovaleva. Voprosy Khim. Kinetiki, Kal'kulyatsii
 Reaktivnosti, Spetsialnyi Akad. Nauch. S.S.S.R., Otdel.
 Khim. Nauk, 40-53(1955). 28p.

It is shown experimentally that there is a new class of
 radical reactions. These are exchange reactions of radi-
 cals with D₂ during which there is no change in the chemi-
 cal character of the reacting particles and these reactions
 proceed at very high rates and very low activation ener-
 gies. On the basis of these results a new method is sug-
 gested for identifying the structure of radicals taking part
 in the mechanism of complex conversions of hydrocarbons.
 The use of this method does not lead to any essential
 violation of the process. Thus it was possible to prove ex-
 perimentally the existence of isomerization (i.e., the trans-
 fer of free valency) of free radicals which play a very im-
 portant role in the mechanism of a number of complex
 conversions. (auth)

Distr: 4E43/4E36

MARDALEYSHVILI, R. YE.

"Study of the Possibility of Isomerization of Free Radicals by the Method of Their Exchange with Molecular Deuterium." Moscow Order of Lenin and Order of Labor Red Banner State U imeni M. V. Lomonoso, Chemical Faculty, Chair of Chemical Kinetics, Moscow, 1955
(Dissertation for the Degree of Candidate of Chemical Sciences)

SO: Knizhnaya Letopis', No. 32, 6 Aug 55

USSR/Chemistry - Analysis methods

Card 1/1 : Pub. 147 - 15/27

Authors : Mardaleyshvili, R. E.; Lavrovskaya, G. K.; and Voyevodskiy, V. V.

Title : Micro-method of analyzing heavy water

Periodical : Zhur. fiz. khim. 28/12, 2195-2198, Dec 1954

Abstract : A new compensation method for measuring vapor pressures was utilized in determining the deuterium content of water. This method permits carrying out heavy water analyses (deuterium content in water) in 0.5 mg of water with an accuracy of up to 1 - 0.05 mol/% regardless of the D₂ content in the water. The installations used in connection with this compensation method are described. Eight references ; 5 USSR; 1 USA; 1 English and 1 German (1936-1953). Table; graphs; drawings.

Institution : Academy of Sc. USSR, Institute of Chemical Physics and the V. M. Lomonosov State University, Moscow

Submitted : June 23, 1954

MARDALEYSHVILI, R. Ye.

"Study of the Isomerization of Free Radicals by the Method of Deuteron Exchange," a paper given at the All-University Scientific Conference "Lomonosov Lectures", Vest. Mosk. Un., No.8, 1953

Translation U-7895, 1 Mar 56

MARDALEYSHVILI, R. YE.

USSR/Chemistry - Isotopes, Hydrocarbons

Nov 51

"Mechanism of the Exchange Reaction of Hydrocarbon Radicals With Molecular Deuterium," V.V.Voyevodskiy, G. K. Lavrovskiy, R. Ye. Mardaleyshvili, Inst Chem Phys, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol LXXXI, No 2, pp 215-218

Assumes that high deg and speed of introduction of D atoms, particularly into CH_3 radical, are due to participation of D_2 in addn to that of the few D atoms in the reaction. Investigated interaction of C_2H_5 radicals with D_2 in the absence of D atoms. Found there was substitution in CH_2 groups of ethyl: n-butane substituted in the CH_2 groups could be isolated.

199T6

MARDALEYSHVILI, G.I. (at, Zelenchukskaya)

Myocardial infarct of coronary embolic origin in a 17-year-old youth. Klin.med. 35 no.3:142-143 Mr '57. (MLBA 10:7)

1. Iz Zelenchukskoy rayonnoy bol'nitsy (glavnyy vrach A.I.Yerpulev) Stavropol'skogo kraya.

(MYOCARDIAL INFARCT, etiol. & pathogen.
embolism in adolescent (Rus))

(EMBOLISM, compl.
myocardial infarct in adolescent (Rus))

(ADOLESCENCE, dis.
myocardial infarct caused by embolism (Rus))

MARDALEISHVILI, T.G.

Effect of factors of the TSkhaltubo health resort on the functions
of kidneys in hypertonic disease. Trudy Tbil.GIDOV 6:427-433 '62.
(MIRA 16:2)

(HYPERTENSION)

(TSKHALTUBO—HEALTH RESORTS, WATERING PLACES, ETC.)

MARDALE, Ioan

A main object in the competition, a better use of machines and construction equipment. Munca sindic 7 no.4:18-21 Ap '63.

1. Presedinte al comitetului sindicatului de la intreprinderea de constructii siderurgice, Hunedoara.

MARDALE, Ioan

Supporting the idea of qualification and its improvement. Munca
sindic 6 no.5:37-40 My '62.

1. Presedinte al comitetului sindicatului de la Intreprinderea
de constructii siderurgice, Hunedocara.

The analogue analysis of a digital ...

32591
S/569/61/003/000/010/011
D201/D305

Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: H. Chestnut, A. Dabul, D. Leiby, AIEE Transactions, Paper no. 58 - 1324, Presented in October 1958.

ASSOCIATION: Katedra automatyki i telemechaniki Politechniki Warszawskiej (Department of Automation and Telemechanics of the Warsaw Polytechnic)

Card 3/3

The analogue analysis of a digital ...

32591
S/569/61/003/000/010/011
D201/D305

position control and contains all components of the controlling digital computer. The analytical analysis of the dynamic properties, together with determination of optimum parameters of the velocity follow-up system under investigation presents considerable difficulties due to the following: Discrete measurements of velocity, the delay in the feedback circuit and the resulting switching character of motor control. The proposed analogue consists of operational amplifiers and polarized relays. The action of the digital tachometer is simulated by two integrators, one of which is connected to the output of the follow-up system and the other to the input of comparison element, the integrators being consecutively interchanged. The two-phase motor of the follow-up system is simulated by a component with the full control voltage of both polarities and a non-linear dependence of the moment on velocity. The above analogue was also used for analysis of transient and steady states of the system as depending on different parameters. The period of the analysis was 0.02 sec. with a 500-fold time-scale increase. A discussion took place, in which Baltrushevich and B.Ya. Kogan (USSR) took part. There are 10 figures and 4 references: 3

Card 2/3

32991

S/569/61/003/000/010/011

D201/D305

16.6000 (1132)

AUTHORS: Findeisen, W., and Mardal, W. (Poland)

TITLE: The analogue analysis of a digital velocity follow-up system

SOURCE: International Federation of Automatic Control. 1st Congress, Moscow, 1960. Statisticheskiye metody issledovaniya. Teoriya struktur, modelirovaniye, terminologiya, obrazovaniye. Moscow, Izd-vo AN SSSR, 1961, 479 - 488

TEXT: The author describe the design procedure and the results of experimental analysis of a velocity follow-up system with a digital computing tachometer. The pulses at the output of the tachometer are counted during a certain time interval τ and the result obtained at the end of each interval is compared with a given value. The difference of these two values is the controlling signal of the motor for the next time interval τ . The whole of the velocity follow-up system is contained in the second of the feedback circuit of

Card 1/3

MARDAKHIAHVILI, Sh.I., kand. med. nauk; TARONISHVILI, R.S.

Phagocytic activity of leucocytes in torpid erosions and tumorous processes of the cervix uteri and its changes under the effect of radiation therapy. Akush. i gin. 40 no.4:87-92 J1-Ag '64 (MIRA 18:4)

1. Kafedra onkologii (zav. - prof. K.F. Vepkhvadze) Tbilisskogo gosudarstvennogo instituta usovershenstvovaniya vrachey i Respublikanskiy onkologicheskoy dispensar (glavnyy vrach A.V.TSereteli) Ministerstva zdravookhraneniya Gruzinskoy SSR, g. Kutaisi.

MARDAKHIVASHVILI, Sh. I.

Phagocytic activity of the granulocytes in the blood of patients with tumors during the process of treatment. Vop. onk. 8 no.7: 75-82 '62. (MIRA 15:7)

1. Iz kafedry onkologii (zav. - zasl. deyat. nauki, prof. K. F. Vepkhvadze Tbilisskogo gosudarstvennogo instituta usovershenstvovaniya vrachey (dir. - prof. G. R. Khundadze).

(PHAGOCYTOSIS) (TUMORS)

MARDAKHIAHVILI, Sh.I.

Comparative evaluation of hypotensive drugs in experimental renal hypertension. Farm.i toks. 24 no.2:161-163 Mr-Ap '61.

(MIRA 14:6)

1. Kafedra farmakologii (zav. - deystvitel'nyy chlen AMN SSSR prof. V.V.Zakusov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.

(HYPERTENSION)

KOGAN, A.Kh.; MARDAKHIASHVILI, Sh.I. (Moskva)

Phagocytic activity of leukocytes during the process of carcinogenesis under the influence of cellophane and 9,10-dimethyl-1,2-henzathracene in white rats. Arkh.pat. 23 no.4:43-49 '61.
(MIRA 14:6)

1. Iz kafedry patologicheskoy fiziologii (zav. - prof. S.M. Pavlenko) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.

(PHAGOCYTOSIS) (CELLOPHANE--TOXICOLOGY)
(BENZATHRACENE--TOXICOLOGY) (TUMORS)

L 34191-65
ACCESSION NR: AP5007527

crease in the electrical conductivity of the alloys is due to an increase in charge carrier concentration and partly to an increase in mobility. Orig. art. has: 5 figures and 5 tables.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: IC,Mf,

NO REF SOV: 008

OTHER: 007

Card 2/2

L 31191-65 EWT(m)/EWG(m)/EMP(t)/EMP(b) LJP(c) RDW/JD 15
ACCESSION NR: AP5007527 S/0316/64/000/006/0097/0103 B

AUTHOR: Rustamov, P. G.; Mardakhayev, B. N.; Alidzhanov, M. A.; Safarov, M. G.

TITLE: Solid solutions in the system gallium sulfide - gallium telluride 27

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no.6, 1964, 97-103

TOPIC TAGS: gallium sulfide, gallium telluride, diamond, semiconductor, phase diagram, solid solution, thermoelectromotive force, alloy conductivity

ABSTRACT: Compounds of type $A_2^{III}B_3^{IV}$, which crystallize in the defect structure of zinc blende, belong to the class of semiconductors of the diamond group. The authors studied the system Ga_2S_3 - Ga_2Te_3 , both components being $A_2^{III}B_3^{IV}$ -type compounds. Ten alloys of this system were prepared. Thermograms were recorded, the microstructure was examined, the microhardness was measured, and an x-ray phase analysis was performed. On the basis of these studies, a phase diagram of the system was plotted, and the critical temperatures were determined. The electrical conductivity, thermal conductivity, and thermo-emf of the alloys were measured as a function of temperature in cast samples. All the alloys were found to have semiconducting properties, which are fully tabulated. The data indicate that an in-

Card 1/2

RUSTAMOV, P.G.; MARDAKHAYEV, B.N.

Solubility in the ternary system SeO_2 - Na_2O - H_2O at 25°C . Azerb.khim.
zhur. no.4:131-140 '63. (MIRA 17:2)

L 17078-65

ACCESSION NR: AP5000090

the ampul is gradually lowered into the furnace. The second step is the vertical positioning of the furnace and the maintenance of the ampul at a uniform temperature inside the furnace. The overall reaction time is 2--4 hr for 18 g of gallium sulfide free of free sulfur. The resulting GaS and Ga_2S_3 have melting points of 965 and $1120 \pm 10^\circ C$, respectively. It was concluded that this method can be used for other systems in which one of the components is highly volatile. It is claimed that the use of vibration would decrease the above reaction time. The simplicity of the apparatus makes it more acceptable for this type of preparation than existing conventional methods. Orig. art. has: 1 figure.

ASSOCIATION: Institut khimii AN AzerbSSR (Institute of Chemistry, AN AzerbSSR)

SUBMITTED: 25May63

ENCL: 00

SUB CODE: IC, GC

NO REF SOV: 003

OTHER: 004

ATD PRESS: 3148

Card 2/2

L 17078-65

ACCESSION NR: AP5009090

S/0249/64/020/009/0013/0015

AUTHOR: Rustanov, P. G.; Mardakhayev, B. N.

TITLE: Preparative methods ~~for~~ alloys and compounds using sulfur 15

SOURCE: AN AzerbSSR. Doklady, v. 20, no. 9, 1964, 13-15

TOPIC TAGS: semiconducting alloy, semiconducting alloy preparation, semiconducting compound, semiconducting compound preparation, gallium sulfide, gallium trisulfide

ABSTRACT: Because of the disadvantages of conventional preparative methods for semiconducting alloys and compounds, a new visually controlled "semihorizontal" two-temperature method has ²⁷ been developed and used to prepare GaS and Ga_2S_3 . The new method consists of two steps. In the first step an evacuated quartz ampul containing metallic gallium and elemental sulfur is placed in a furnace which is in a semihorizontal position with the empty top of the ampul outside the furnace. When the furnace temperature exceeds the melting point of the product, a temperature gradient is established between the top and the bottom of the ampul. The temperature of the top is regulated manually by raising or lowering the ampul into the furnace (and with additional water-cooling at higher temperature) on the basis of visual observation of the amount of condensed sulfur. As the reaction proceeds,

Card 1/2

MARDAKHAYEV, B. I.

Reaction of selenides of gallium and a lanthanide (erium and samarium of the type A_2III_3VI). G. Kh. Efendiyev, E. Sh. Karayev, I. O. Nasilov.

Solid solutions in the quasibinary systems $Ga_2S_3-Ga_2Te_3$ and $Ga_2S_3-Ga_2Se_3$. P. G. Rustanov, B. I. Mardakhayev, E. Melikova, M. Alidzhanov, M. Safarov. (Presented by G. Kh. Efendiyev--10 minutes).

Chemical bonding, structure of the energy zones and some properties of semiconducting compounds of rare earth elements with selenium. G. F. Karavayev (10 minutes).

Report presented at the 3rd National Conference on Semiconductor Compounds, Kishinev, 16-21 Sept 1963

VOZNESENSKIY, N.A., kand. tekhn. nauk; MARDAKHAYEV, A.A., inzh.

Eliminate organizational causes of accidents in oil-well
drilling. Bezop. truda v prom. 7 no.4:1-2 Ap '63.

(MIRA 16:4)

(Oil fields--Safety measures)

IL 29487-66

ACC NR: AP6020024

SOURCE CODE: CZ/0079/65/007/003/0309/0309

AUTHOR: Gryglewski, R.; Marczyński, T.; Trabka, J.

ORG: Institute of Pharmacology, PAN; Academy of Medicine, Krakow

TITLE: Central nervous action of alpha-aminobutyrylcholine²² [This paper was presented at the 7th Annual Psychopharmacological Meeting, Jesenik, 20-23 January 1965.]

SOURCE: Activitas nervosa superior, v. 7, no. 3, 1965, 309

TOPIC TAGS: nervous system drug, neuron, serotonin, pharmacology

ABSTRACT: Alpha-aminobutyrylcholine (ABC) exerts a central action differing according to the site of application; it combines competitively with cholinergic receptors of neurons. In trophotropic structures where the cholinergic neurons are usually excited by serotonin, ABC blocks the cholinergic receptors and thus produces an anticholinergic and antiserotonin action. In ergotropic structures, its action resembles that of acetylcholine in high concentrations. [Orig. art. in Eng.] [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1

JS

MARGZYNSKI, Tadeusz

Pharmacology and effects of some new tryptamine derivatives.
Folia med. Cracov. 6 no.3:255-312 1961.

SUPNIEWSKI, J.; MISZTAL, S.; MARCZYNSKI, T.

Pharmacological properties of melatonin. Acta physiol. polon. 11
no.5/6:892-893 '60.

1. Z Zakładu Farmakologii PAN i A.M. w Krakowie. Kierownik:
prof.dr J.Supniewski.
(INDOLES pharmacol)

MARCZYNSKI, T.

Studies on variations of the oxygen content in certain parts
of the brain in rabbits. Acta physiol.polon. 11 no.5/6:819-820
'60.

1. Z Zakladu Farmakologii A.M. w Krakowie. Kierownik: prof.dr
J.Supniewski.

(BRAIN metab)

(OXYGEN metab)

MARCZYNSKI, T.; VETULANI, J.

Effect of serotonin (5-HT) and N-dimethylserotonin (bufotenin) on the hypertensive reflex produced by compressing both common carotid arteries in cats. Acta physiol.polon. 11 no.5/6:817-818 '60.

1. Z Zakładu Farmakologii PAN i A.M. w Krakowie, Kierownik:
prof.dr J.Supniewski.

(SEROTONIN pharmacol)

(HYPERTENSION exper)

(CAROTID ARTERIES physiol)

SUPNIEWSKI, J.; MARCZYNSKI, T.; MISZTAL, S.

Biological properties of melatonin (5-methoxy-N-acetyltryptamine).
Bul Ac Pol biol 8 no.10:483-487 '60. (EEAI 10:9)

1. Laboratory of Pharmacology, Cracow, Polish Academy of Sciences.

(Methoxy group) (Acetyl group) (Tryptamine)

MARCZYNSKI, Tadeusz

Serotonin and the so-called psychomimetic drugs in central nervous
system function tests. Postepy hig. med. doaw. 13 no.3:283-305 1959.
(PSYCHOPHARMACOLOGY) (SEROTONIN, pharmacol.)

and with
MARCZYŃSKI, T.

EXCERPTA MEDICA Sec 2 Vol 12/4 Physiology Apr 59

1438. BIOLOGICAL PROPERTIES OF KINETINE. EFFECT ON THE GROWTH OF EHRLICH ASCITES CARCINOMA AND AMYTAL-SARCOMA IN MICE - Marczyński T. Lab. of Pharmacol., Polish Acad. of Scis, Cracow - BULL. ACAD. POL. SCI. CL. 2 1958, 6/3 (119-124) Tables 3 illus. 13
2-Furylaminopurine (kinetin) in doses of 50 mg./kg. inhibits for a short time the growth of free Ehrlich ascites carcinoma cells in the peritoneal cavity. Smaller doses (40 mg./kg.) showed some inhibiting action at first, but after 2 to 3 days the tumours grew rapidly. Doses of 15 to 25 mg./kg. stimulated the growth of carcinoma cells. Sampey - Greenville, S.C. (11, 5, 16)

~~MARCZYNSKI, Tadeusz~~

5-Hydroxytryptamine (5-HT, serotonin, enteramine) as a new hormone. Postepy hig. med. dosw. 11 no.1:77-94 1957.

1. Zaklad Farmakologii AM. Krakow, ul. Grzegorzanska 16.
(SEROTONIN,
review (Pol))

MARCYŃSKI, TADEUSZ

Biological properties of *p*-hydroxypropiofenone. Tadeusz Marczyński (Dept. Pharmacol. Acad. Med., Krakow). *Poln. Biol.* (Warsaw) 4, 195-212 (1950) (English summary). *p*-Hydroxypropiofenone (PHP) given as Na salt, in doses of 100 mg./kg. body wt., to white mice had the following effect: In the anterior lobe of the hypophysis cerebri degeneration of the cytoplasm of the alpha and beta cells appeared as well as a decrease of their nos. Further large neutrophilic cells appeared. Changes in the ovaries indicate inhibitory action of PHP to gonadotropin A with simultaneous synergism with gonadotropin B. A depressive action of PHP with regard to the thyrotropic functioning of the hypophysis seems to be indicated. The combination of estrogenic and antigonadotropic effects together with a thyroid inhibiting possibility may make PHP a desirable drug in pituitary hyperfunctioning with symptoms of hyperfolliculinemia. Anna H. Kofler.

MARCZYNSKI, R.

621.373.42 : 621.316.313
2854. Stabilized output electronic generator for power system analysers. R. MARCZYNSKI. Bull. Acad. Polon. Sci. Cl. 4, 3, No. 1, 19-21 (1953).

The power stabilization of the synchronized sinusoidal oscillator (simulating the synchronous machine in a.c. network analyser), with frequency controlled by the reactance valve, is obtained by the use of the phase discriminator (of new design) and the low-pass RC filter in the synchronization loop. A block diagram, being the modification of the work described by Kaneff [Abstr. 3553 (1953)] of the system is given and the differential equation for the power balance is derived in the form $A\dot{\phi} + B\ddot{\phi} + C \sin \phi = D$, where constants A, B, C, D are system parameters and ϕ is the phase. For the full analytical discussion of this equation and for the description of the similar circuit see Abstr. 4828 (1953).

R. SYSKI

MARCZYNSKI, Kzimirz; OBOJSKA, Krystyna; OSTROWSKA, Danuta; ZAREMBA, Andrzej.

Evaluation of the combined action of novobiocin and pyrrolidine methyltetracycline hydrochloride on the penicillin resistant strains of *Staphylococcus aureus*. Med. dosw. microbiol. 17 no.1: 37-46 '65.

1. Z Pracowni Biologicznej Kontroli Antybiotyków Instytutu Leków i z Pracowni Formy Leku Instytutu Antybiotyków w Warszawie.

BALASZ, Aleksander; PLINTA, Maria; MARCZYNSKI, Kazimierz

Case of ovarian abscess with fistula following along the
inguinal canal. Pol. tygod. lek. 29 no.39:1469-1470 27 S 1965.

1. Z Kliniki Położnictwa i Chorob Kobięcych AM w Krakowie
(Kierownik: prof. dr. Stefan Schwarz).

MARCEWICKI, Kazimierz; KRAJEWSKI, Witold

Clinical evaluation of torecan therapy of vomiting in pregnancy.
Pol. tyg. lek. 19 no.8:303-304 17 F '64.

1. V I Kliniki Poloznictwa i Chorob Kobietych Akademii Medycyny
w Krakowie (kierownik: prof. dr. Stefan Schwarz).

SCHWARZ, Stefan; ZAMELLO, Jerzy; KLIMEK, Roman; MARCZYNSKI, Kazimierz;
MATECKI, Tadeusz; MILEWICZ, Stanislaw; SOLARZ, Edward

Statistical analysis of the surgical material of the 1st Obstet-
rical and Gynecological Clinic of the Academy of Medicine in
Krakow during the period 1960-1961. Ginek. pol. 33 no. 37-41
Ja-F'64

1. Z I Kliniki Położniczej i Ginekologicznej AM w Krakowie;
kierownik: prof.dr.med. S.Schwarz.

*

Marczyński, K.

DOBEK, Stanisław; BETHAL, M.; HYŻY, Wł.; MADEJ, J.; MARCZYŃSKI, K.;
PISARCZYK, A.; ZYŁOWSKI, J.

Eclampsia at the Krakow Clinic for the last 50 years. Gin.
polska 28 no.2:171-175 Mar-Apr 1956.

1. Z I Kliniki Położnictwa i Chorób Kobietych A.M. w Krakowie.
Kierownik: prof. dr. St. Schwarz. Stanisław Dobek--Kraków,
ul. Kopernika 23.

(Eclampsia, statistics
clin. statist., in Poland (Pol))

MARCZYNSKI, Jozef, inz. (Warsaw)

Training staff members with poor qualifications. Przegl good
36 no.9:366-367 S '64.

MARCZYNSKI, Jozef, mgr inz.; KIELB, Szozezan, mgr inz.

The Bipromet Designing Office of Nonferrous Metallurgy. Rady i
metale 9 no.7:370-377 J1 '64.

1. Director, Bipromet Designing Office of Nonferrous Metallurgy
Katowice (for Marczynski).
2. Chief Engineer, Bipromet, Katowice.

MARCZYNSKI, JAN

Chemical Abst.
Vol. 48 No. 9
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Foods

Determination of the degree of spoilage in sausage. Irena Dziuzniewska, Jan Marczyński, and Krystyna Ossowska (Stacja Sanitarno-Epidemiol., Warsaw). *Roczniki Państwowego Zakładu Hig.* 1953, No. 3a, 407-20 (English summary).—Sausage was examined for bacteria, pH, and NH_3 . *Bacillus subtilis* and *B. mesentericus* were present in 66% of the samples, coliforms in 80, anaerobic organisms in 15, and *Proteus vulgaris* in 2% of samples. The total no. of bacteria detd. by plate counts at 37° ranged for fresh sausage (I) $0.3 \times 10^6/\text{g.}$, for dry and doubtful sausage (II) $4 \times 10^6 - 1.2 \times 10^7/\text{g.}$, and for spoiled sausage (III) above $8 \times 10^6/\text{g.}$. The pH of I was 5.6-6.4, for II from 5.9-6.5, and for III 5.9-8.2. The upper limit of NH_3 in I was established at 30, in II 30-40, and in III above 40 mg. %. It was concluded that the bacteria flora has a decisive influence upon the nature of changes taking place in the sausages and influences the quantity of NH_3 formed. Richard Ertlich

PERLINSKA-SCHNEJDER, Lidia; GUTKA, Anna; MARCZYNSKA-WOLANSKA, Hanna;
SZYBA, Zofia

Quantitative cultures of urine in the diagnosis of significant bacteriuria. Pol. tyg. lek. 20 no.19:679-681 10 My '65.

1. Z II Kliniki Chorob Wewnętrznych AM w Lublinie (Kierownik: prof. dr. med. Alfred R. Tuszkiewicz).

MARCZYNSKA-ROBOWSKA, Maria; BARSZCZ, Tatiana

Is the past dietetic management and prolonged restriction of movements
advisable in infectious hepatitis in children? *Pediat. pol.* 37 no.9:
909-917 S '62.

1. Z Kliniki Chorob Zakaznych Wieku Dzieciecego AM w Warszawie Kierownik:
prof. dr med. J. Bogdanowicz.
(HEPATITIS INFECTIOUS) (DIET THERAPY) (MOVEMENTS)

MARCZYNSKA-ROBOWSKA, Maria

Specific clinical course of infectious hepatitis in infants up to
one year of age. Przegl. epidem., Warsz. 13 no.1:51-52 1959.

(HEPATITIS, INFECTIOUS, in inf. & child,
inf. under 1 year of age (Pol))

(INFANT, NEWBORN, dis.
infect. hepatitis (Pol))

MARCZYNSKA-ROBOWSKA, Maria

Pancreatic necrosis during Still's disease. *Pediat. polska*
32 no.1:62-66 Jan 57.

1. Z Kliniki Chorob Zakaźnych Wieków Dziecięcego A.M. w
Warszawie Kierownik: prof. dr. med. J. Bogdanowicz.
Adres: Warszawa, ul. Wolska 37.

(ARTHRITIS, RHEUMATOID, in inf. & child
Still's dis. with pancreatic necrosis (Pol))
(PANCREAS, dis.
necrosis in Still's dis. (Pol))

MARCZYNSKA-ROBOWSKA, Maria (Warszawa, Kopernika 23 m 14)

ACTH therapy of rheumatic disease in children. *Pediat. polska*
29 no.4:245-252 Ap '54.

1. Z Kliniki Chorob Zakaźnych Wieków Dziecięcego Akademii Medycznej
w Warszawie. Kierownik: prof. dr med. J. Bogdanowicz.

(CHOREA, therapy.

*ACTH)

(RHEUMATIC HEART DISEASE, therapy.

*ACTH)

(ACTH, therapeutic use,

*chorea & rheum. heart dis.)

MAROZYNSKA-ROBOWSKA, M.

Results of ACTH therapy of rheumatic disease in children. *Pediat. polska* 27 no. 11:1283-1292 Nov 1952. (CLML 24:1)

1. Of the Clinic of Pediatric Infectious Diseases (Head -- Prof. J. Bogdanowicz, M.D.) of Warsaw Medical Academy.

MARCZYNSKA-ROBOWSKA, M.

Case of cat scratch disease in a 12-year-old girl. *Pediat. polska*
27 no. 7:859-860 July 1952. (CIWL 22:4)

1. Of the Clinic of Pediatric Infectious Diseases (Head--Prof. J.
Bogdanowicz, M. D.) of Warsaw Medical Academy.

MARCZYNSKA-ROBOWSKA, Z.

Eosinophil test in rheumatism. *Pediatr polska* 26 no.6:616-626
June 1951. (CLML 21:1)

1. Of the Clinic for Children's Infectious Diseases (Head —
Prof. J. Bogdanowicz, M.D.) of Warsaw Medical Academy.

MARCZYNSKA-ROBOWSKA, Maria

Liver function tests in Still's disease. *Prac. Inst. Reumatologii.*
Reumatologia (Warsz.) 3 no.2:127-133 '65.

I. Z Kliniki Chorob Zakaznych Wieku Dzieciacego AM w Warszawie
(Kierownik: prof. dr. med. J. Bogdanowicz).

MARCZYNSKA-ROBOWSKA, Maria

Diagnosis value of tests performed in Still's disease and in
rheumatoid arthritis in children. Reumatologia (Warsz.) 1
no.2:137-142 '63.

1. Z Kliniki Chorob Zakaznych Wieku Dzieciacego Akademii
Medycznej w Warszawie (Kierownik Klinik: prof. dr J. Bogdanowicz).

GEDLICZKA, Otmar; MARCZYNSKA, Antonina; SKAWINSKI, Stefan;
SZNAPKA, Zbigniew; LEWANDOWSKI, Adam; ZONTEK, Franciszek

The bromsulphalein (BSP) half-time ($t_{1/2}$) in rabbits
following hemorrhage. Pol. tyg. lek. 18 no.40:1481-1482 30 S '63.

1. Z II Kliniki Chirurgicznej AM w Krakowie; kierownik: prof.
dr J. Oszaeki.

(SULFOBROMOPHTHALEIN) (LIVER FUNCTION TESTS)
(HEMORRHAGE) (BLOOD VOLUME)

MARCZYNSKA, Antonina; OSZACKI, Jan; KULPA, Jan

Body composition in patients with euthyroid goiter. Pol. przegl.
chir. 37 no.5:471-477 My '65.

1. Z Instytutu Onkologii w Krakowie (Dyrektor: prof. dr. H.
Kozłowska) i z II Kliniki Chirurgicznej AM w Krakowie
(Kierownik: prof. dr. J. Oszaeki).

MARCZYNSKA, Antonina; LEWANDOWSKI, Jerzy; GORNIAK, Antoni

Determinations of the half-life of bromosulphophthalein (T 1/2 BSP)
in the serum of patients with cholecystolithiasis. Pol. tyg. lek.
20 no.21:753-755 24 My '65.

1. Z Instytutu Onkologii, Oddział w Krakowie (Kierownik: prof. dr.
med. Hanna Kolodziejaska) i z II Kliniki Chirurgicznej AM w Krakowie
(Kierownik: prof. dr. med. Jan Onzacki).

OSZACKI, Jan; prof. dr. med.; MARCZYŃSKA, Antonina; ADAMCZYK, Bogumil;
GEDLICZKA, Otmar

Nitrogen balance in patients with simple goiter. Pol. tyg. lek.
20 no.1:13-15 4 Ja '65

1. Z Instytutu Onkologii, Oddział w Krakowie (Dyrektor: prof. dr.
med. Hanna Kolodziejska) i z II Kliniki Chirurgicznej Akademii
Medycznej w Krakowie (Kierownik: prof. dr. med. Jan Oszacki).

MARCZYŃSKA, Antonina; ADAMCZYK, Bogumił; KUŁPA, Jan; LENCZYK, Maria;
OSZACKI, Jan

The composition of the muscle in patients with cancer of the
stomach. Nowotwory 15 no.2:145-152 Ap-Je '65.

1. Z Instytutu Onkologii w Krakowie (Dyrektor: prof. dr. med.
H. Kolodziejaska).

MARCZYNSKA, Antonina; KULPA, Jan; OSZACKI, Jan

Starch test in the determination of pancreatic function in patients with cancer of the stomach. Nowotwory 15 no.2: 139-144 Ap-Je '65.

1. Z Instytutu Onkologii w Krakowie (Dyrektor: prof. dr. med. H. Kolodziejska).

MARCZYNSKA, Antonina; OSZACKI, Jan; ADAMCZYK, Bogumil; SZCZYGIEL, Krzysztof

Effect of surgical trauma (exploratory laparotomy) on the nitrogen and potassium balance in patients with cancer of the stomach. Nowotwory 15 no.2:131-138 Ap-Je '65.

1. Z Instytutu Onkologii w Krakowie (Dyrektor: prof. dr. med. H. Kolodziejaska).

OSZACKI, Jan; MARCZYNSKA, Antonina; ADAMCZYK, Bogumil; HENCZYK, Maria

Nitrogen balance in duodenal ulcer. Pol. przegl. chir. 36
no.10:1209-1212 O '64

1. Z Instytutu Onkologii, Oddział w Krakowie (Kierownik:
prof. dr. H. Kołodziejska) i z II Kliniki Chirurgicznej
Akademii Medycznej w Krakowie (Kierownik: prof. dr. Oszaeki).

OSZACKI, Jan; MARCZYNSKA, Antonina; ADAMCZYK, Bogumil; GEDLICZKA, Otmar

Body composition in gastric and duodenal ulcer. Pol. przegl.
chir. 36 no.3:341-348 Mr '64.

1. Z II Kliniki Chirurgicznej Akademii Medycznej w Krakowie
(Kierownik: prof. dr J. Oszaeki) i z Instytutu Onkologii
Oddział w Krakowie (Kierownik: prof. dr H. Kolodziejaska).

MARCZYNSKA, Antonina; ADAMCZYK, Bogumil; LENCZYK, Maria

Sugar curves following glucose load in patients with gastric cancer. Polski przegl. chir. 35 no.3:181-185 '63.

1. Z Instytutu Onkologii Oddział w Krakowie Kierownik: doc.
dr H. Kołodziejaska i z II Kliniki Chirurgicznej AM w Krakowie
Kierownik: prof. dr J. Czaacki.
(GLUCOSE TOLERANCE TEST) (STOMACH NEOPLASMS)

ADAMCZYK, Bogumil; MARCZYNSKA, Antonina; LENCZYK, Maria

Urinary excretion of neutral 17-letosteroids in patients with gastric cancer. Polski przegl. chir. 35 no.2:105-108 '63.

1. Z Instytutu Onkologii, Oddział w Krakowie Kierownik: doc.
dr H. Kołodziejaska i z II Kliniki Chirurgicznej AM w Krakowie
Kierownik: prof. dr J. Oszański.
(17-KETOSTEROIDS) (STOMACH NEOPLASMS) (URINE)

OSZACKI, Jan; URBAN, Anna, MARCZYNSKA, Antonina, KULPA, Jan

Nitrogen balance and stomach ulcer morphology. Nowotwory 13
no.4:289-295 O-D'63.

1. Z Instytutu Onkologii w Krakowie (dyrektor: prof.dr.med.
H.Kolodziejska) i z II Kliniki Chirurgicznej AM w Krakowie
(kierownik: prof. dr.med. J.Oszacki).

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OSZACKI, Jan; MARCZYNSKA, Antonina; ADAMCZYK, Bogumil

Body composition in patients with gastric cancer. Nowotwory
13 no.2:137-144 '63.

1. Z Instytutu Onkologii Oddział w Krakowie Dyrektor: doc. dr
med. H. Kolodziejska i z II Kliniki Chirurgicznej AM w Krakowie
Kierownik: prof. dr med. J. Oszacki.
(BODY COMPOSITION) (STOMACH NEOPLASMS)